

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of the Claims

1-31. (Canceled).

32. (Original) A fluid pressure reduction device comprising:
a plurality of stacked disks having a perimeter and a hollow center aligned along a longitudinal axis; and
each disk having first and second flow paths extending between the hollow center and the perimeter, the first flow path including an inlet section, an outlet section, and an intermediate section extending between the inlet and outlet sections, the second flow path having an inlet section, an outlet section, and an intermediate section extending between the inlet and outlet sections;
wherein the second flow path intermediate section and first flow path intermediate section cross at an intersection; and
wherein each of the first and second flow path intermediate sections including includes a recovery zone downstream of the intersection.

33. (Original) The fluid pressure reduction device of claim 32, in which the first and second flow paths are directed toward the intersection at substantially the same plane, so that fluid flowing through the first and second flow paths undergoes an abrupt direction change at the intersection.

34. (Original) The fluid pressure reduction device of claim 32, in which the first flow path includes a first ramp upstream of the intersection directed to a first plane and the second flow path includes a second ramp upstream of the intersection directed to a second plane, so that fluid flowing through the first and second flow paths creates shear forces at the intersection.

35. (Original) The fluid pressure reduction device of claim 32, in which the first flow path inlet section and the second flow path inlet section are integrally provided as a common inlet section.

36. (Original) The fluid pressure reduction device of claim 35, in which the common inlet section is aligned along a radial disk reference line extending from the axis to the common inlet section so that substantially equal volumes of fluid enter the first and second flow paths.

37-47. (Canceled)

48. (Original) A method of assembling a fluid pressure reduction device, comprising:

forming a plurality of disks having at least one flow path extending between a hollow center and a perimeter of the disk, each flow path including an inlet section, an outlet section, and an intermediate section extending between the inlet and outlet sections, the flow path dividing the disk into at least first and second blank portions, each disk further including a first bridge portion extending between the first and second blank portions;

stacking the disks along an axis;

securing the stacked disks together to form a stacked disk assembly;

removing the first bridge portion of each disk in the stacked disk assembly.

49. (Original) The method of claim 48, in which the first bridge portion comprises an inner ring portion extending about the interior portion of the disk.

50. (Original) The method of claim 48, in which the first bridge portion comprises an outer ring portion extending about the perimeter of the disk.

51. (Original) The method of claim 48, in which the first bridge portion comprises a tab extending between the first and second blank portions.

52. (Original) The method of claim 48, in which the disk further includes a second bridge portion, and in which the method further comprises the step of removing the second bridge portion of each disk in the stacked disk assembly.

53. (Original) The method of claim 52, in which the first bridge portion comprises an inner ring portion extending about the interior portion of the disk, and the second disk portion comprises an outer ring portion extending about the perimeter of the disk.

54. (Original) The method of claim 52, in which the first and second bridge portions comprise first and second tabs extending between adjacent blank portions.

55. (New) A fluid pressure reduction device comprising:

a plurality of stacked disks having a perimeter and a hollow center aligned along a longitudinal axis; and

the plurality of stacked disks defining at least one flow path extending between the hollow center and the perimeter, the flow path including an inlet section, an outlet section, and an intermediate section having a generally spiral shape and extending between the inlet and outlet sections, the flow path including a pressure reducing structure and a recovery zone positioned immediately downstream of the pressure reducing structure;

wherein a first disk of the plurality of stacked disks includes the inlet section and an upstream portion of the intermediate section, and a second disk of the plurality of stacked disks located adjacent the first disk includes the outlet section and a downstream portion of the intermediate section, the intermediate section upstream portion fluidly communicating with the intermediate section downstream portion.

56. (New) The fluid pressure reduction device of claim 55, in which pressure reducing structure comprises a pair of abrupt direction changes in flow path as the intermediate section transitions from the first disk to the second disk, and in which the recovery zone is positioned immediately downstream of the pair of abrupt direction changes.

57. (New) The fluid pressure reduction device of claim 55, in which opposing walls of the flow path intermediate section gradually diverge from one another as the flow path intermediate section advances from the inlet section to the outlet section.